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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/367,081 01/24/00 PENNEAU

J 15675.P291

IM52/0718

EXAMINER

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ART UNIT	PAPER NUMBER
1771	S

DATE MAILED: 07/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/367,081	PENNEAU ET AL.
	Examiner Teresa O'Connor	Art Unit 1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 January 2000.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 16-20 and 22-24 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) 10-15, 21, and 25-29 is/are objected to.
- 8) Claims 1-29 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- 15) Notice of References Cited (PTO-892)
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 18) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 19) Notice of Informal Patent Application (PTO-152)
- 20) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-15, 21 and 25-29, drawn to a porous composite product.

Group II, claims 16-20, drawn to a process of producing a porous composite product.

Group III, claims 22-24, drawn to an electrode film of porous composite product.

The inventions listed as Groups I-III do not relate to single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Claim 1 is either obvious over or anticipated by Landi U.S. 3,407,249 and U.S. 3,407,096 (these patents are in the patent family of BE 693,135) and JP 357100142. Accordingly, the special technical feature linking the four inventions, a porous composite product formed of a polymeric material and at least 20% of one or more fillers and the product being obtained by extrusion and having high specific surface area, does not provide a contribution over the prior art, and no single general inventive concept exists. Therefore, restriction is appropriate.

A telephone call was made to Mr. Eric Hyman on May 22, 2001 to request an oral election to the above restriction requirement, subsequently on June 29, 2001 an election was made without traverse to prosecute the invention of Group I, claims 1-15, 21, and 25-29. Affirmation of this election must be made by Applicant in the reply to this Office Action, 37 CFR 1.142(a).

Claims 16-20 and 22-24 are withdrawn from further consideration by the Examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Specification***

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### ***Claim Objections***

Claims 1-15, 21 and 25-29 are objected to because of the following informalities:

Claim 1, line 2, "at least 20% of" should be --at least 20% by weight of--.

Claim 7, lines 3 and 4, "40% of" should be --40% by weight of--.

Claim 7, line 5, the "q.s." should be spelled out or clarified, and the "100%" should be --100% by weight--.

Appropriate correction is required.

Claims 10-15, 21 and 25-29 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 10-15, 21 and 25-29 have not been further treated on the merits.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-6, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 5 are indefinite because they contain improper Markush Group terminology. MPEP 2173.05(h) requires that the components of a Markush Group be clearly specified. Thus, the use of the term "optionally" in a Markush Group is improper because it renders the scope of the claims indefinite.

With respect to Claim 6, the term "preferably" followed by a range of molecular weight, makes the claim indefinite as to the scope of the claim. For prosecution purposes, the Examiner will interpret the language "preferably polyethers with a molecular mass of between 200,000 and 1,000,000" as not limiting the scope of the claim.

With respect to Claim 8, the terminology "in particular" renders the claim indefinite as to the scope of the claim. For prosecution purposes, the Examiner will interpret the language "composed in particular of active charcoal, inorganic particles or metallic particles" as limiting the scope of the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Landi (U.S. 3,407,096).

With respect to Claims 1-3, Landi discloses a porous composite product formed of polymeric material, at least 20% filler, and being capable of being obtained by extrusion; exhibiting high specific surface area; a mean pore diameter of less than 0.5  $\mu\text{m}$ . See Col. 1, lines 52-54; Col. 2, lines 62-64, lines 11-13, lines 52-57; Col. 5, lines 70-73. Note that the use of graphite and other carbons and porosity of up to 75% indicates that the product exhibits a high specific surface area.

With respect to Claims 4-6, the teachings of Landi are the same as relied upon in Claim 1. Landi discloses a porous composite product wherein the polymeric material is

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a fluorinated polyethylene and optionally thermoplastic polymer, such as polyether, that is soluble in polar organic solvents or water and which remain after the implementation of the manufacturing process. See Col. 2, line 61; Col. 6, lines 6-10.

With respect to Claims 7 and 8 the teachings of Landi are the same as relied upon in Claim 1. Landi discloses a porous composite product wherein the product has 10 to 40% by weight of polyolefin, 5 to 40% of polyether, and the remaining weight of filler. See Claim 1; Col. 6, lines 6-10. The filler having high specific surface area, composed of active charcoal, inorganic particles, or metallic particles. See Col. 2, lines 52-57.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Landi (U.S. 3,407,096). The teachings of Landi are the same as relied upon in Claim 8. Landi discloses the use of graphite as the filler and that the porosity of the product is up to 75% wherein the pore diameter is between 0.2 and 1  $\mu\text{m}$ . See Table V; Col. 5, lines 70-73. However, Landi does not disclose the BET specific surface of the filler. It is the Examiner's position that the disclosure of

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Landi inherently provides a filler that exhibits a specific surface of between 300 and 3000 m<sup>2</sup>/g. Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the presently claimed specific surface would have been present, given that Landi teaches the use of graphite as a filler and recites products having pore sizes as small as 0.2 µm and porosities as high as 75%. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa O'Connor whose telephone number is (703) 305-9900. The examiner can normally be reached on Monday-Thursday 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (703) 308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-5885 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

tmo <sup>TMO</sup>  
July 16, 2001



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